## ABSTRACT

A method of examining a sample, which includes: exposing a reference to a first set of electromagnetic radiation, to form a second set of electromagnetic radiation scattered from the reference; exposing a sample to a third set of electromagnetic radiation to form a fourth set of electromagnetic radiation scattered from the sample; and interfering the second set of electromagnetic radiation and the fourth set of electromagnetic radiation. The first set and the third set of electromagnetic radiation are generated from a source; at least a portion of the second set of electromagnetic radiation is of a frequency different from that of the first set of electromagnetic radiation; and at least a portion of the fourth set of electromagnetic radiation is of a frequency different from that of the third set of electromagnetic radiation.

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